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Thr	Phe	Val 515	Trp	Lys	Leu	Val	Ala 520	Asn	Phe	Arg	Arg	Gly 525	Phe	Arg	Lys
Glu	Asp 530	Arg	Asn	Gly	Arg	Asp 535	Glu	Met	Asp	Ile	Glu 540	Leu	His	Asp	Val .
Ser 545	Pro	Ile	Thr	Arg	His 550	Pro	Leu	Gln	Ala	Leu 555	Phe	Ile	Trp	Ala	Ile 560
Leu	Gln	Asn	Lys	Lys 565	Glu	Leu	Ser	Lys	Val 570	Ile	Trp	Glu	Gln	Thr 575	Arg .
Gly	Cys	Thr	Leu 580	Äla	Ala	Leu	Gly	Ala 585	Ser	Lys	Leu	Leu	Lys 590		Leu
Ala	Lys	Val 595		Asn	Asp	Ile	Asn 600	Ala	Ala	Gly	Glu	Ser 605	Glu	Glu	Leu
Ala	Asn 610		Tyr	Glu	Thr	Arg 615		Val	Gļu	Leu	Phe 620	Thr	.Glu	Cys	Tyr
Ser 625		Asp	Glu	Asp	Leu 630	Ala	'Glu	Gln	Leu	Leu 635	Val	Tyr	Ser	Cys	Glu 640
Ala	Trp	Gly	Gly	Ser 645		·Cys	Leu	Glu	Leu 650	Ala	Val	Glu	Ala	Thr 655	Asp
Gln	His	Phe	11e 660		Gln	Pro	Gly	Val 665		Asn	Phe		Ser 670		Gln
Trp	туг	Gly 675		Ile	Ser	Arg	Asp 680		Ъуs	Asn	Arg	Lуs 685		Ile	Leu
Çys	Lev 690		e Ile	: Ile	Pro	Leu 695		Gly	Cys	Gly	Phe 700	Val	Ser	Phe	· Arg
Lys 705	_	s Pro	o Val	. Asp	710		Lys	Lys	Leu	Leu 715	Trp	Tyr	Tyr	· Val	Ala 720
Phe	e Phe	€ Thi	c Ser	725		· Val	. 'Val	Phe	Ser 730		Asn	Val	. Val	. Phe 735	
Ile	e Ala	a Phe	e Lev 740		Lev	Phe	e.Ala	745		. Leu	Leu	Met	750	Phe	His
Set	r Va	1 Pro		s Pro	Pro	Glu	Lev. 760		. Lev	туг	Ser		ı Val	Phe	Val
Let	r Ph		s Ası	o Glu	ı Val	775		Tr	туз	val	. Asn 780		/ Val	l Asn	Tyr
Ph:		r As	p Lei	ı _. Tr]	P Asr . 790		l Met	Ası		795		Let	ı Phe	e Tyr	Phe 800
11	e Al	a Gl	y Il	e Va:		e Arg	g Lei	ı His	s Sei 810		Asn	Lys	s Sei	r Ser 815	Leu
ту	r Se	r Gl	у <u>А</u> г 82		1 I1	e Phe	e Cy	s Let 82		р Туз	: Ile	e Ile	e Phe 83	e Thr O	Leu

Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile 835 . 840 845

Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Leu Phe Leu 850 855 860

Phe Ala Val Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu 865 870 875 880

Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr 885 890 895

Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly 900 905 910

Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys 915 920 925

Pro Leu Cys Val Glu Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu 930 935 940

Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile 945 950 955 960

Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr 965 970 975

Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu 980 985 990

Val Gln Glu Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val 995 1000 1005

Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys 1010 1020

Lys Glu Lys Asn Met Glu Ser Ser Val Cys Cys Phe Lys Asn Glu Asp 1025 1030 1035 1040

Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val 1045 1050 1055

Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Glu Glu Met Arg His Arg 1060 1065 1070

Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys 1075 1080 1085

Glu Ile Ala Asn Lys Ile Lys · 1090 1095

<210> 13

<211> 1104

<212> PRT

<213> Homo sapiens

<400> 13

Met Ser Phe Arg Ala Ala Arg Leu Ser Met Arg Asn Arg Asn Asp 1 5 10 15

Thr Leu Asp Ser Thr Arg Thr Leu Tyr Ser Ser Ala Ser Arg Ser Thr 20 25 30

Asp Leu Ser Tyr Ser Glu Ser Asp Leu Val Asn Phe Ile Gln Ala Asn
35 40

		-														
F	he	Lys 50	Lys	Arg	Glu	Cys	Val 55	Phe	Phe	Ile	Lys	Asp 60	Ser	Lys	Ala	Thr
G	Slu 65	Asn	Val	Cys	Гуѕ	Cys 70	Gly	Tyr	Ala	Gln	Ser 75	Gln :	His	Met	Glu	80 Gly
7	Chr	Gln	Ile	Asn	Gln 85	Ser	Glu	Lys	Trp	Asn 90	Tyr	Lys	Lys	His	Thr 95	Lys
C	3lu	Phe	Pro	Thr 100	Asp	Ala	Phe	Gly.	Asp	Ile	Gln	Phe	Glu	Thr 110	Leu	Gly
1	Lys	Lys	Gly 115	Lys	Tyr	Ile	Arg	Leu 120	Ser	Cys	Asp	Thr	Asp 125	Ala	Glu	Ile
	Leu	Tyr 130	Glu	Leu	Leu	Thr	Gln 135	His	Trp	His	Leu	Lys 140	Thr	Pro	Asn	Leu
	Val 145	Ile	Ser	Val	Thr	Gly 150	Gly	Ala	Ļys	Asn	Phe 155	Ala	Leu	Lys	Pro	Arg 160
	Met	Arg	Lys	Ile	Phe 165	Ser	Arg	Leu	Ile	Tyr 170	Ile	Ala	Gln	Ser	Lys [.] 175	Gly _.
	Ala	Trp	Ile	Leu 180		Gly	Gly	Thr	His 185	.Tyr	Gly	Leu	Met	Lys 190	ŢYr	Ile
	Gly	Glu	Val 195		Arg	Asp ,	Asn	Thr 200	Ile	Ser	Arg	Ser	Ser 205	Glu	Glu ·	Asn
	Ile	Val 210		Ile	Gly	Ile	Ala 215	Ala	Trp	Gly	Met	Val 220	Ser	Asn	Arg	Asp
	Thr 225		Il∈	Arg	Asn	Cys 230	Asp	Ala	Glų	Gly	Tyr 235	Phe	Leu	Ala	Gln	Tyr 240
			ŕ	•	245					250					255	Asn,
				260)			Asp	265	٠.	•		. •	270		
			275	5				1 Gln 280					285			
		290)				295	5				300				Phe
	305	5				310			•		315	;			-	11e 320
					325	5				330)		٠		335	
		_		34	0				345	5				350)	Ser
			35	5	•			360) ·		•		365	5		Arg
		3,7	0		•		37	5	٠			. 380)			lle
	38	5				390	0				39	5	•			400
	As	p Gl	u Il	e Va	1 Se 40		n Al	a Ile	e Se:	r Ty:		a Lei	ту:	r Ly:	s Ala 41	a Phe

Ser Thr Ser Glu Gln Asp Lys Asp Asn Trp Asn Gly Gln Leu Lys Leu 425 Leu Leu Glu Trp Asn Gln Leu Asp Leu Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr His Asp Val Leu Thr Glu Leu 485 490 Phe Ser Asn His Phe Ser Thr Leu Val Tyr Arg Asn Leu Gln Ile Ala . 505 Lys Asn Ser Tyr Asn Asp Ala Leu Leu Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile Leu Gln Asn Lys Lys Glu Leu 570 Ser Lys Val Ile Trp Glu Gln Thr Arg Gly Cys Thr Leu Ala Ala Leu 585 580 Gly Ala Ser Lys Leu Leu Lys Thr Leu Ala Lys Val Lys Asn Asp Ile 595 600 Asn Ala Ala Gly Glu Ser Glu Glu Leu Ala Asn Glu Tyr Glu Thr Arg . 615 Ala Val Glu Leu Phe Thr Glu Cys Tyr Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu Ala Trp Gly Gly Ser Asn Cys 650 Leu Glu Leu Ala Val Glu Ala Thr Asp Gln His Phe Ile Ala Gln Pro Gly Val Gln Asn Phe Leu Ser Lys Gln Trp Tyr Gly Glu Ile Ser Arg 680 Asp Thr Lys Asn Trp Lys Ile Ile Leu Cys Leu Phe Ile Ile Pro Leu 695 Val Gly Cys Gly Phe Val Ser Phe Arg Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala Phe Phe Thr Ser Pro Phe Val 730. Val Phe Ser Trp Asn Val Val Phe Tyr Ile Ala Phe Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His Ser Val Pro His Pro Pro Glu 760

Leu Val Leu Tyr Ser Leu Val Phe Val Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu Phe Tyr Phe Ile Ala Gly Ile Val Phe Arg 805 810 Leu His Ser Ser Asn Lys Ser Ser Leu Tyr Ser Gly Arg Val Ile Phe 825 Cys Leu Asp Tyr Ile Ile Phe Thr Leu Arg Leu Ile His Ile Phe Thr 835 840 Val Ser Arg Asn Leu Gly Pro Lys Ile Ile Met Leu Gln Arg Met Leu 860 855 Ile Asp Val Phe Phe Phe Leu Phe Leu Phe Ala Val Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys Pro Leu Cys Val Glu Leu Asp .935 Glu His Asn Leu Pro Arg Phe Pro Glu Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile Leu Leu Val Asn Leu Leu Val 970 . Ala Met Phe Gly Tyr Thr Val Gly Thr Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu Val Gln Glu Tyr Cys Ser Arg 1000 Leu Asn Ile Pro Phe Pro Phe Ile Val Phe Ala Tyr Phe Tyr Met Val 1015 Val Lys Lys Cys Phe Lys Cys Cys Cys Lys Glu Lys Asn Met Glu Ser 1035 Ser Val Cys Cys Phe Lys Asn Glu Asp Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val Lys Ile Asn Thr Lys Ala Asn. 1065 Asp Thr Ser Glu Glu Met Arg His Arg Phe Arg Gln Leu Asp Thr Lys 1080 Leu Asn Asp Leu Lys Gly Leu Leu Lys Glu Ile Ala Asn Lys Ile Lys 1100 1090 1095

<210> 14 <211> 192 <212> PRT <213> Homo sapiens

22133 Homo Sapiens

Val Cys Lys Cys Gly Tyr Ala Gln Ser Gln His Met Glu Gly Thr Gln
20 25 30

Ile Asn Gln Ser Glu Lys Trp Asn Tyr Lys Lys His Thr Lys Glu Phe 35 40 45

Pro Thr Asp Ala Phe Gly Asp Ile Gln Phe Glu Thr Leu Gly Lys Lys 50 55 60

Gly Lys Tyr Ile Arg Leu Ser Cys Asp Thr Asp Ala Glu Ile Leu Tyr 65 70 75 80

Glu Leu Leu Thr Gln His Trp His Leu Lys Thr Pro Asn Leu Val Ile 85 90 95

Ser Val Thr Gly Gly Ala.Lys Asn Phe Ala Leu Lys Pro Arg Met Arg 100 105 110

Lys Ile Phe Ser Arg Leu Ile Tyr Ile Ala Gln Ser Lys Gly Ala Trp 115 120 125

Ile Leu Thr Gly Gly Thr His Tyr Gly Leu Met Lys Tyr Ile Gly Glu 130 135 140

Val Val Arg Asp Asn Thr Ile Ser Arg Ser Ser Glu Glu Asn Ile Val 145 150 155 160

Ala Ile Gly Ile Ala Ala Trp Gly Met Val Ser Asn Arg Asp Thr Leu 165 170 175

Ile Arg Asn Cys Asp Ala Glu Val Pro Val Gly Gln Glu Glu Val Cys 180 185 190

<210> 15 <211> 1095 <212> PRT <213> Homo sapiens

Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu 20 25 . 30

Val: Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe 35 40

Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala 50 $\,$ 55

Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp 65 70 75 80 Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp 120 His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys 135 . Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His Tyr Gly Leu Thr Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp 200 Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu 215 Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro 230 Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn 250 Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu Glu Lys His Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly 280 Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Lys Glu Thr Leu 300 . Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val . 310 Glu Gly Ser Gly Arg Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val 330 Glu Asp Ala Pro Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe Leu Pro Arg Thr Val Ser Arg Leu Ser Glu Glu Glu Thr Glu Ser Trp 360 Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn 410 Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu 425 Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp

Leu	Gln 450	Glu	Val	Met	Phe	Thr 455	Ala	Leu	Ile		Asp	Arg	Pro	Lys	Phe
Val 465	Arg	Leu	Phe	Leu	Glu 470	Asn	Gly	Leu		Leu 475	Arg	ГÀż	Phe	Leu	Thr . 480
His	Asp	Val	Leu	Thr 485	Glu	Leu	Phe	Ser	Asn 490	His	Phe	Ser	Thr	Leu 495	Val
Tyr	Arg	Asn	Leu 500	Gln	Ile	Ala	Lys.	Asn 505	Ser	Tyr	Asn	Asp	Ala 510	Leu	Leu
Thr	Phe	Val 515	Trp	Lys	Leu	Val	Ala 520	Asn	Phe	Arg		Gly 525	Phe	Arg ·	Lys
Glu	Asp 530	Arg	Asņ	Gly	Arg	Asp 535	Glu	Met	Asp	Ile	Glu 540	Ļeu	His	Asp	Val
Ser 545	Pro	Ile	Thr	Arg	His 550	Pro	Leu	Gln	Ala	Leu 555	Phe	Ile	Trp	Ala	Ile. 560
Leu	Gln	Asn	Lys ·	Lys 565	Glu	Leu	Ser	Lys	Val 570	Ile	Trp	Glu ·.	Gln	Thr 575	Arg
Gly	Cys	Thr	Leu 580		Ala	Leu	Gly	Ala 585	Ser	Lys	Leu	Leu	Lys 590		Leu
Ala	Lys	Val 595		Asn	Asp ·	Ile	Asn 600	Ala	Ala	Gly	Glu	Ser 605	Glu	Glu	Leu
Ala	Asn 610		Tyr	Glu	Thr	Arg 615	Ala	Val	Glu	Leu	Phe 620	Thr	Glu	Cys	Tyr
Ser 625		Asp	Glu	Asp	Leu 630	Ala	Glu	Gln	Leu	Leu 635	Val	Tyr	Ser	Суѕ	Glu 640
Ala	Trp	Gly	Gly	Ser 645	Asn	Cys	Leu	Glu	Leu 650	Ala	Val	Glu	Ala	Thr 655	Asp
. Gln	His	Phe	660		Gln	Pro	Gly	Val 665	Gln	Asn	Phe	Leu	Ser 670	Lys	Gln
		675	5		Ser	-	680					685			
Cys	690		e Ile	e Ile	Pro	Leu 695	Val	Gly	Cys	Gly	Phe 700	Val	Ser	Phe	Arg
705	5			•	710	٠		-		715			·		720
Phe	e Phe	e Thi	r Sei	725		· Val	Val	Ph∈	730		Asn	Val	. Val	735	Tyr
			. 74	0				745	5				750)	His
		75	5 .				760					765	•		e Val
Le	u Ph ,77		s As	p Gl	u Val	775		ı Trı	тут	r Val	Asr 780	Gly	y Vai	l Ası	a Tyr
Ph 78		r As	p Le	u Trj	p Asr 790		L Met	. Ası	7 Th	r Let 79!	ı Gly	, Lei	ı Ph	e Ty:	r Phe 800

Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys Ser Ser Leu 805 810 815

Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile Phe Thr Leu 820 825 830

Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile 835 840 845

Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Phe Leu Phe Leu 850 860

Phe Ala Val Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu 865 870 875 880

Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr 885 890 895

Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly 900 905 910

Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys 915 920 925

Pro Leu Cys Val Glu Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu 930 935 940

Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile 945 950 955 960

Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr 965 970 975

Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu 980 985 990

Val Gln Glu Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val 995 1000 1005

Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys 1010 1015 1020

Lys Glu Lys Asn Met Glu Ser Ser Val Cys Cys Phe Lys Asn Glu Asp 1025 1030 1035 1040

Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val 1045 1050 1055

Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Glu Glu Met Arg His Arg 1060 1065 1070

Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys
1075 1080 1085

Glu Ile Ala Asn Lys Ile Lys 1090 1095

<210> 16

<211> 1095

<212> PRT

<213> Homo sapiens

<400> 16 Met Arg Asn Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp 120 His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp 200 Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Val Asp Asn 245 Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Lys Glu Thr Leu Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val 315 Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val 325 Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp 360 Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val

Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn 410 Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu 425 Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp 440 Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr 475 470 His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val 490 Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly .Phe Arg Lys 520 Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu 585 Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr 615 Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu Ala Trp Gly Gly Ser Asn Cys Leu Glu Leu Ala Val Glu Ala Thr Asp Gln His Phe Ile Ala Gln Pro Gly Val Gln Asn Phe Leu Ser Lys Gln Trp Tyr Gly Glu Ile Ser Arg Asp Thr Lys Asn Trp Lys Ile Ile Leu Cys Leu Phe Ile Ile Pro Leu Val Gly Cys Gly Phe Val Ser Phe Arg Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr

Ile Ala Phe Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His Ser Val Pro His Pro Pro Glu Leu Val Leu Tyr Ser Leu Val Phe Val Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu Phe Tyr Phe 795 Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys Ser Ser Leu 805 Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile Phe Thr Leu Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile 840 Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Leu Phe Leu 855 Phe Ala Xaa Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu . .. 870875 Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr 885 890 Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys Pro Leu Cys Val Glu Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu 935 Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu . 980 985 Val Gln Glu Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val 1000 Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys 1015 Lys Glu Lys Asn Met Glu Ser Ser Val Cys Cys Phe Lys Asn Glu Asp 1035 Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val 1045 Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Glu Glu Met Arg His Arg 1065 Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys 1080 1085 Glu Ile Ala Asn Lys Ile Lys

<210> 17

225

<211> 652 <212> PRT <213> Homo sapiens <400> 17 Met Arg Asn Arg Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala 55 Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp 70 . Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp 90 Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp 120 His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile 150 Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His 170 Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp 200 Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu . 215 Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro

Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu 260 265 270

Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly

Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn

245

250

275 280 285

Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Lys Glu Thr Leu 290 295 300

Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val 305 310 315 320

Glu	Gly	Ser	Gly	Gln 325	Île	Ala	Asp	Val	Ile 330	Ala	Ser	Leu	Val	Glu 335	Val
Glu	Asp	Ala	Leu 340	Thr	Ser	Ser	Ala	Val 345	Lys	Glu	Lys	Leu	Val 350	Arg	Phe .
Leu.	Pro	Arg 355	Thr	Val	Ser	Arg	Leu 360	Pro	Glu	Glu	Glu	Thr 365	Glu	Ser	Trp
Ile	Lys 370	Trp	Leù	Lys	Glu	Ile 375	Leu	Glu	Cys	Ser	His 380	Leu	Leų	Thr	Val
11e 385	Lys	Met	Glu	Glu	Ala 390	Gly	Asp	Glu	Ile	Val 395	Ser	Asn	Ala	Ile	Ser 400
Tyr	Ala	Leu	Tyr	Lys 405	Ala	Phe	Ser	Thr	Ser 410	Glu	Gln	Asp	Lys	Asp 415	Asn
Trp	Asn	Gly	Gln 420	Leu .	Lys	Leu	Leu	Leu 425	Glu	Trp	Asn	Gln	Leu 430	Asp	Leu
Ala	Asn	Asp 435	Glu ·	Ile	Phe	Thr	Asn 440		Arg	Arg	Trp	Glu 445	Ser	Ala	Asp
Leu	Gln 450	Glu	Val	Met	Phe	Thr 455	Ala	Leu	Ile	Lys	Asp 460	Arg	Pro	Lys ·	Phe
Val 465	Arg	Leu	Phe	Leu	Glu 470		Gly	Leu	Asn	Leu 475	Arg	rys	Phe	Leu	Thr 480
His	Asp	Val	Leu	Thr 485	Glu	Leu	Phe	Ser	Asn 490	His	Phe 	Ser	Thr	Leu 495	Val
Tyr	Arg	Asn	Leu 500	Gln	Ile :	Ala	Lys	Asn 505	Ser	Tyr	Asn	Asp	Ala 510	Leu	Leu
Thr	Phe	Val 515	Trp	Lys	Leu	Val	Ala 520	Asn	Phe	Arg	Arg	Gly 525	Phe	Arg	ГÀ́г
Glu	Asp 530	Arg	Asn	Gly	Arg	Asp 535	Glu	Met	Asp	Ile	Glu 540	Leu	His	Asp	Val
Ser 545	Pro	Ile	Thr	Arg	His 550	Pro	Leu	·Gln	Ala	Leu 555	Phe	I,le	Trp	Ala	Ile 560
Leu	Gln	Asn	ГÀг	L ys 565	Glu	Leu	Ser	_	Val 570	Ile	Trp	Glu	Gln	Thr 575	_
Gly	Cys	Thr	Leu 580	Ala	Ala	Leu	Gly	Ala 585	Ser	Lys	Leu	Leu	Lys 590	Thr	Leu
Ala	Lys	Val 595	Lys	Asn	Asp	Ile	Asn 600		Ala	Gly	Glu	Ser 605	Glu	Glu	Leu
Ala	Asn 610		Tyr	Glu	Thr	Arg 615	Ala	Val	Glu	Leu	Phe 620	Thr	Glu	Cys	Tyr
Ser 625	Ser	Asp	Glu	Asp	Leu 630	Ala	Glu	Gln	Leu	Leu 635	Val	Tyr	Ser	Cys	Glu 640
Ala	Trp	Gly	Gly	Leu	Glu	Hịs	His	His	His	His	His				

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WO 03/087158 PCT/EP03/03713

Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr 730 Ile Ala Phe Leu Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His Ser Val Pro His Pro Pro Glu Leu Val Leu Tyr Ser Leu Val Phe Val 760 Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu Phe Tyr Phe Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys Ser Ser Leu Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile Phe Thr Leu Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile 840 845 Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Leu Phe Leu 855 Phe Ala Xaa Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu 875 870 Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr. 890 Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly 905 Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys 920 Pro Leu Cys Val Glu Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile 955 Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu 985 Val Gln Glu Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val 1000 .995 . Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys 1015 1020 · Lys Glu Lys Asn Met Glu Ser Ser Val Cys Cys Phe Lys Asn Glu Asp Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Glu Glu Met Arg His Arg 1065

1060

Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys 1075 1080 1085

Glu Ile Ala Asn Lys Ile Lys 1090 1095

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<212> PRT

<213> Homo sapiens

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Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe 35 40 45

Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala
50 60

Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp. 65 70 75 80

Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp 85 90 95

Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser

Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp 115 120

His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys 130 135 140

Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile 145 150 155 160

Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His 165 170 175

Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile 180 185 190

Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp 195 200 205

Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu 210 215 220

Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro 225 230 235

Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn 245 250 255

Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu 260 265 270

Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly 275 280 285

Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Lys Glu Thr Leu 295 Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val 315 Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val 330 325 Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp 360 Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val 375 Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn 410 405 Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu 425 -Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp 440 Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe 455 Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val 490 485 : Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu 505 Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val -535 Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu 585 . Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu 600 Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu 635 630 Ala Trp Gly Gly Leu Glu His His His His His His

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Lys Asn Lys Ile Pro Cys Val Val Val Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn Trp Asn Gly Gln Leu Lys Leu 420 Leu Leu Glu Trp Asn Gln Leu Asp Leu Ala Asn Asp Glu Ile Phe Thr 440 Asn Asp Arg Arg Trp Glu Ser Ala Asp Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe Val Arg Leu Phe Leu Glu Asn 475 Gly Leu Asn Leu Arg Lys Phe Leu Thr His Asp Val Leu Thr Glu Leu 485 490 Phe Ser Asn His Phe Ser Thr Leu Val Tyr Arg Asn Leu Gln Ile Ala 505 Lys Asn Ser Tyr Asn Asp Ala Leu Leu Thr Phe Val Trp Lys Leu Val 520 Ala Asn Phe Arg Arg Gly Phe Arg Lys Glu Asp Arg Asn Gly Arg Asp 535 Glu Met Asp Ile Glu Leu His Asp Val Ser Pro Ile Thr Arg His Pro 555 Leu Gln Ala Leu Phe Ile Trp Ala Ile Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg Gly Cys Thr Leu Ala Ala Leu 585 Gly Ala Ser Lys Leu Leu Lys Thr Leu Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu Ala Asn Glu Tyr Glu Thr Arg 615 Ala Val Glu Leu Phe Thr Glu Cys Tyr Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu Ala Trp Gly Gly Ser Asn Cys Leu Glu Leu Ala Val Glu Ala Thr Asp Gln His Phe Ile Ala Gln Pro 665 Gly Val Gln Asn Phe Leu Ser Lys Gln Trp Tyr Gly Glu Ile Ser Arg Asp Thr Lys Asn Trp Lys Ile Ile Leu Cys Leu Phe Ile Ile Pro Leu Val Gly Cys Gly Phe Val Ser Phe Arg Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr Ile Ala Phe Leu Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His Ser Val Pro His Pro Pro Glu 760 Leu Val Leu Tyr Ser Leu Val Phe Val Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr Phe Thr Asp Leu Trp Asn Val 795 Met Asp Thr Leu Gly Leu Phe Tyr Phe Ile Ala Gly Ile Val Phe Arg 810 Leu His Ser Ser Asn Lys Ser Ser Leu Tyr Ser Gly Arg Val Ile Phe 825 Cys Leu Asp Tyr Ile Ile Phe Thr Leu Arg Leu Ile His Ile Phe Thr 840 Val Ser Arg Asn Leu Gly Pro Lys Ile Ile Met Leu Gln Arg Met Leu 855 Ile Asp Val Phe Phe Phe Leu Phe Leu Phe Ala Val Trp Met Val Ala 870 Phe Gly Val Ala Arg Gln Gly Ile Leu Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly Thr Thr Tyr Asp Phe Ala His .920 Cys Thr Phe Thr Gly Asn Glu Ser Lys Pro Leu Cys Val Glu Leu Asp 935 Glu His Asn Leu Pro Arg Phe Pro Glu Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu Val Gln Glu Tyr Cys Ser Arg ..1000 Leu Asn Ile Pro Phe Pro Phe Ile Val Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys Cys Lys Glu Lys Asn Met Glu Ser

Ser Val Cys Cys Phe Lys Asn Glu Asp Asn Glu Thr Leu Ala Trp Glu 1045 1050 1055

Gly Val Met Lys Glu Asn Tyr Leu Val Lys Ile Asn Thr Lys Ala Asn 1060 1065 1070

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Leu Asn Asp Leu Lys Gly Leu Leu Lys Glu Ile Ala Asn Lys Ile Lys 1090 1095 1100

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<212> PRT

<213> Homo sapiens

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Lys Glu Lys Met Ser Phe Arg Ala Ala Arg Leu Ser Met Arg Asn Arg 20 25 30

Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr Ser Ser Ala Ser

Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Ala Ser Phe Tyr Ala Ala 50 55 60

Phe Arg Thr Gln Thr Cys Pro Ile Met Ala Ser Trp Asp Leu Val Asn 65 70 75 80

Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe Thr Lys 85 90 95

Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala Gln Ser

Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp Asn Tyr 115 120 125

Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp Ile Gln 130 135 140

Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser Cys Asp 145 150 155 160

Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp His Leu
165 170 175

Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys Asn Phe

Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile Tyr Ile 195 200 205

Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His Tyr Gly
210 220

Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile Ser Arg 225 230 235 240

Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp Gly Met 245 250 Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu Gly Tyr 265 Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Val Asp Asn Gly Cys 295 His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly Lys Ile 330 Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu Lys Ala .Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe Leu Pro 395 Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp Ile Lys 410 Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val Ile Lys 425 Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn Trp Asn 455 Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu Ala Asn 470 Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Lys Ser Lys Pro Arg Leu Arg Asp Thr Ile Ile Gln Val Thr Trp Leu Glu Asn Gly Arg Ile 505 Lys Val Glu Ser Lys Asp Val Thr Asp Gly Lys Ala Ser Ser His Met 520 Leu Val Val Leu Lys Ser Ala Asp Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr His Asp Val Leu Thr Glu Leu Phe 570 Ser Asn His Phe Ser Thr Leu Val Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu Thr Phe Val Trp Lys Leu Val Ala

930

Asn Phe Arg Arg Gly Phe Arg Lys Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg Gly Cys Thr Leu Ala Ala Leu Gly 665 Ala Ser Lys Leu Leu Lys Thr Leu Ala Lys Val Lys Asn Asp Ile Asn 680 Ala Ala Gly Glu Ser Glu Glu Leu Ala Asn Glu Tyr Glu Thr Arg Ala 695 Val Gly Glu Ser Thr Val Trp Asn Ala Val Val Gly Ala Asp Leu Pro 715 Cys Gly Thr Asp Ile Ala Ser Gly Thr His Arg Pro Asp Gly Glu Leu Phe Thr Glu Cys Tyr Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu Ala Trp Gly Gly Ser Asn Cys Leu Glu Leu 760 Ala Val Glu Ala Thr Asp Gln His Phe Ile Ala Gln Pro Gly Val Gln 775 Asn Phe Leu Ser Lys Gln Trp Tyr Gly Glu Ile Ser Arg Asp Thr Lys Asn Trp Lys Ile Ile Leu Cys Leu Phe Ile Ile Pro Leu Val Gly Cys 810 Gly Phe Val Ser Phe Arg Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr Ile Ala Phe Leu Leu Phe Ala Tyr Val 855 Leu Leu Met Asp Phe His Ser Val Pro His Pro Pro Glu Leu Val Leu 875 . 870 Tyr Ser Leu Val Phe Val Leu Phe Cys Asp Glu Lys Arg Lys Thr Ala 890 Met Asp Gln Thr Asp Glu Asp Leu Phe Pro Tyr Gly Ala Phe Tyr Gln Phe Leu Met Ile Ser Arg Ser Phe Arg Gly Glu Glu Met Ser Ile Gly 920 · Lys Gln His